

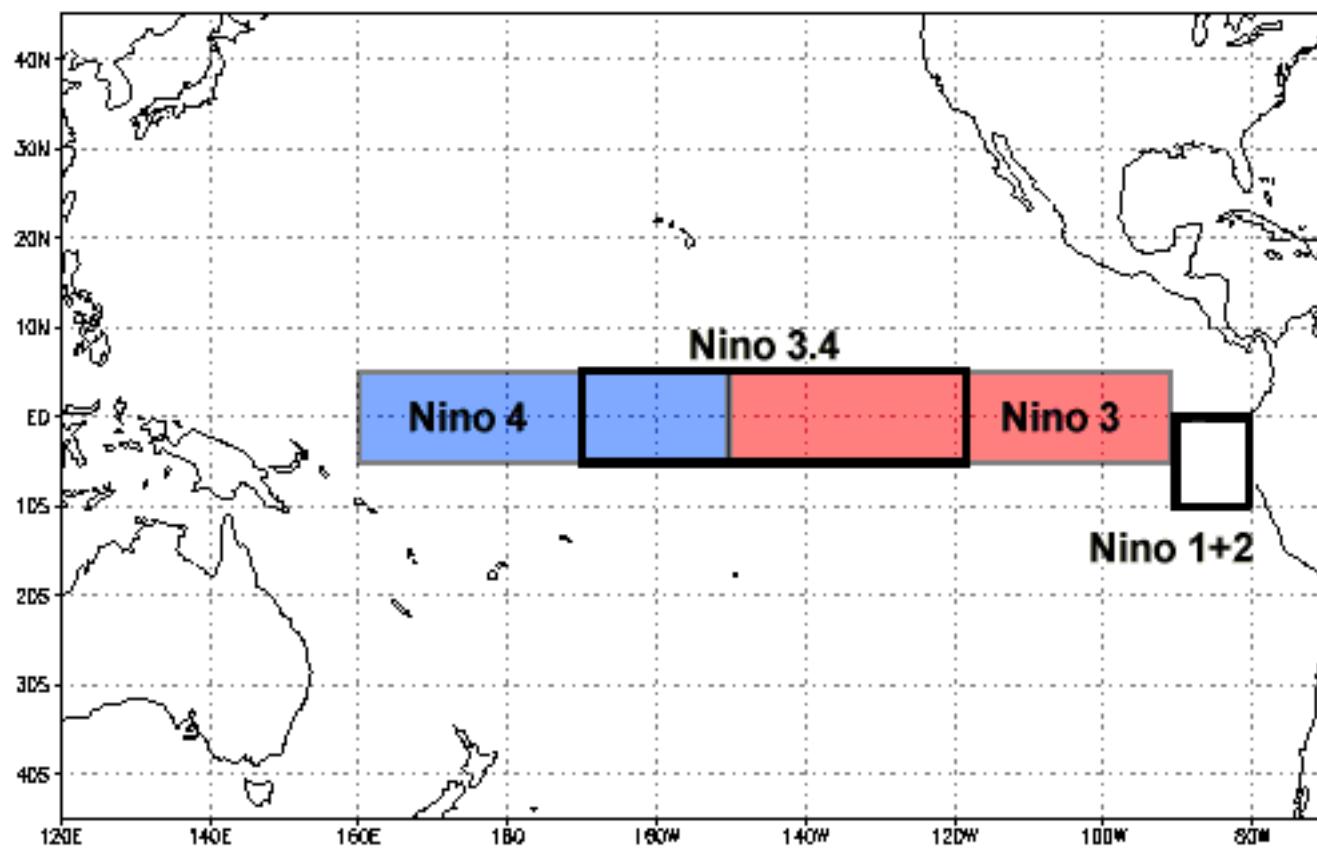
Cayan Extra Slides

**SST averaged over Nino 3.4 region
1961-2000**

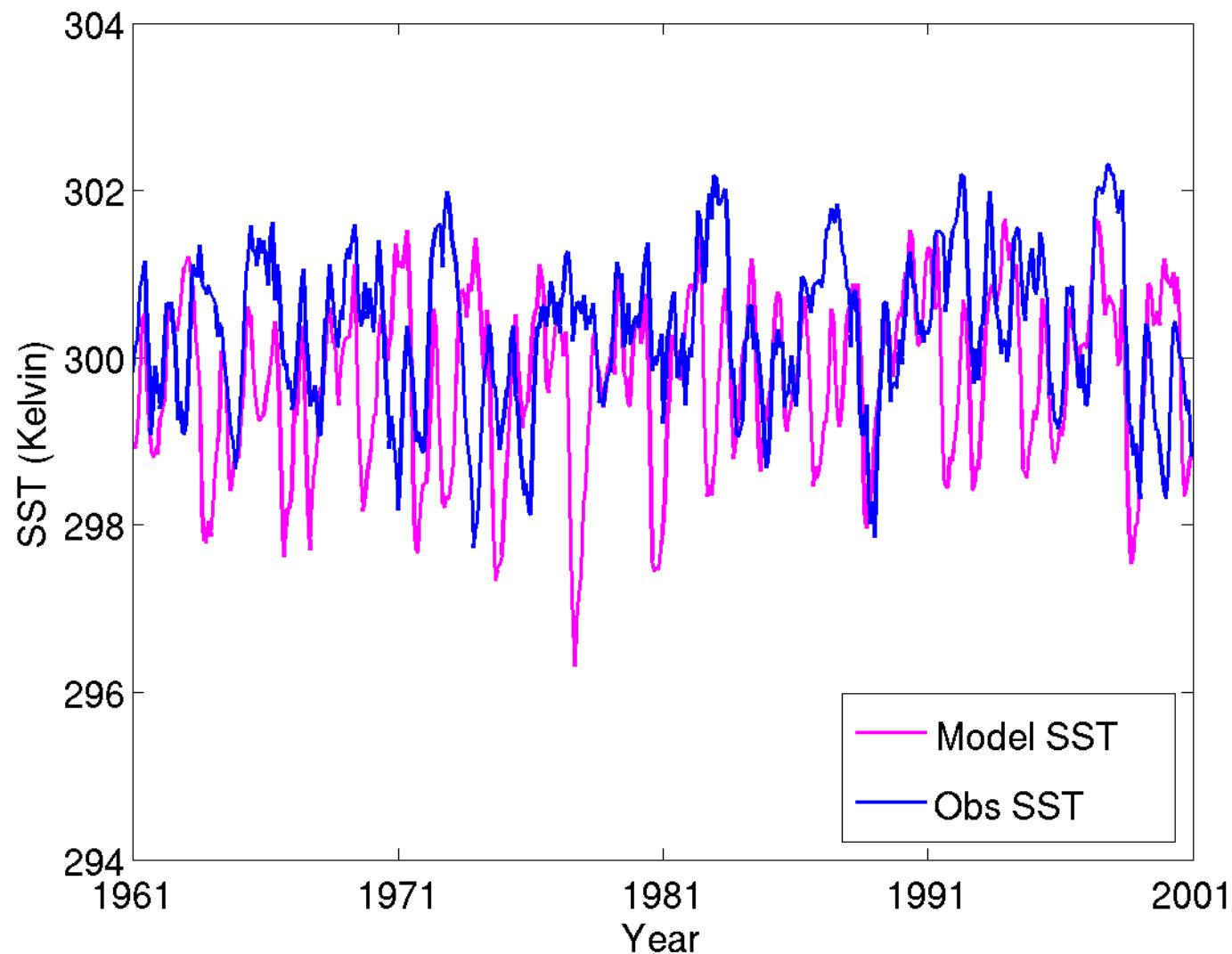
Monthly SST

5 CMIP5 Models and Observation (**COADS**)

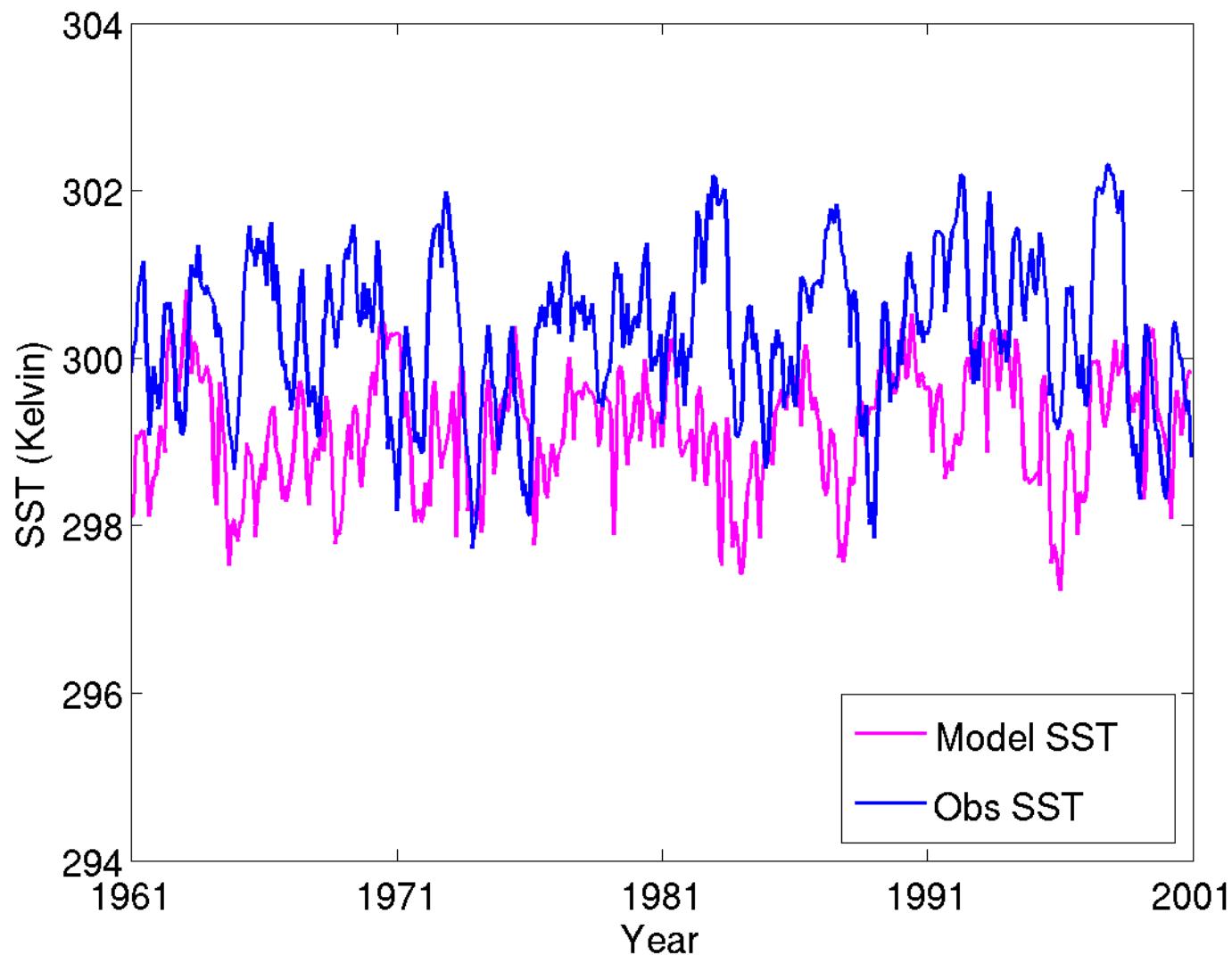
Nino 3.4 [5S-5N 170W-120W]



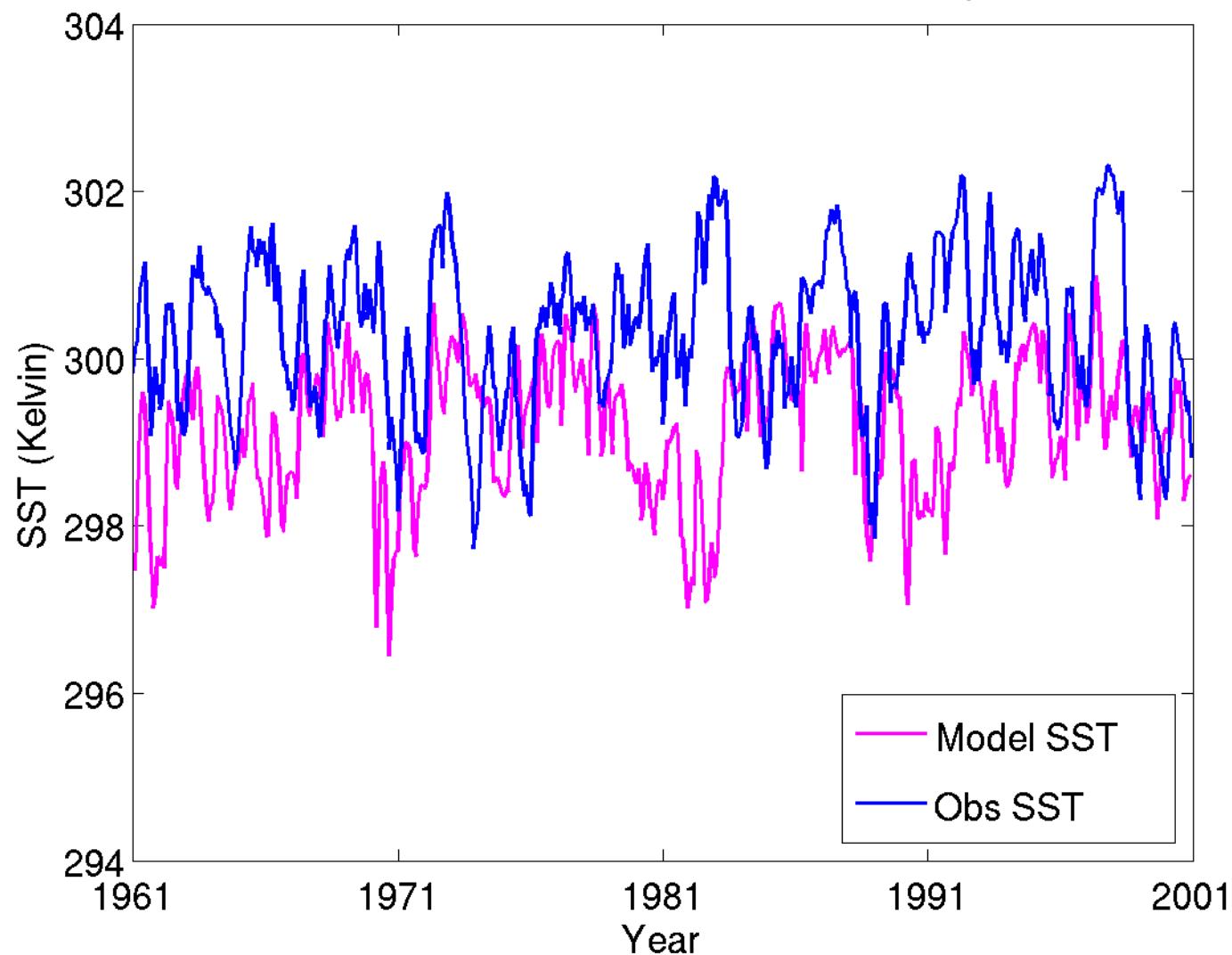
1961 2000 CNRMCM5 SST monthly



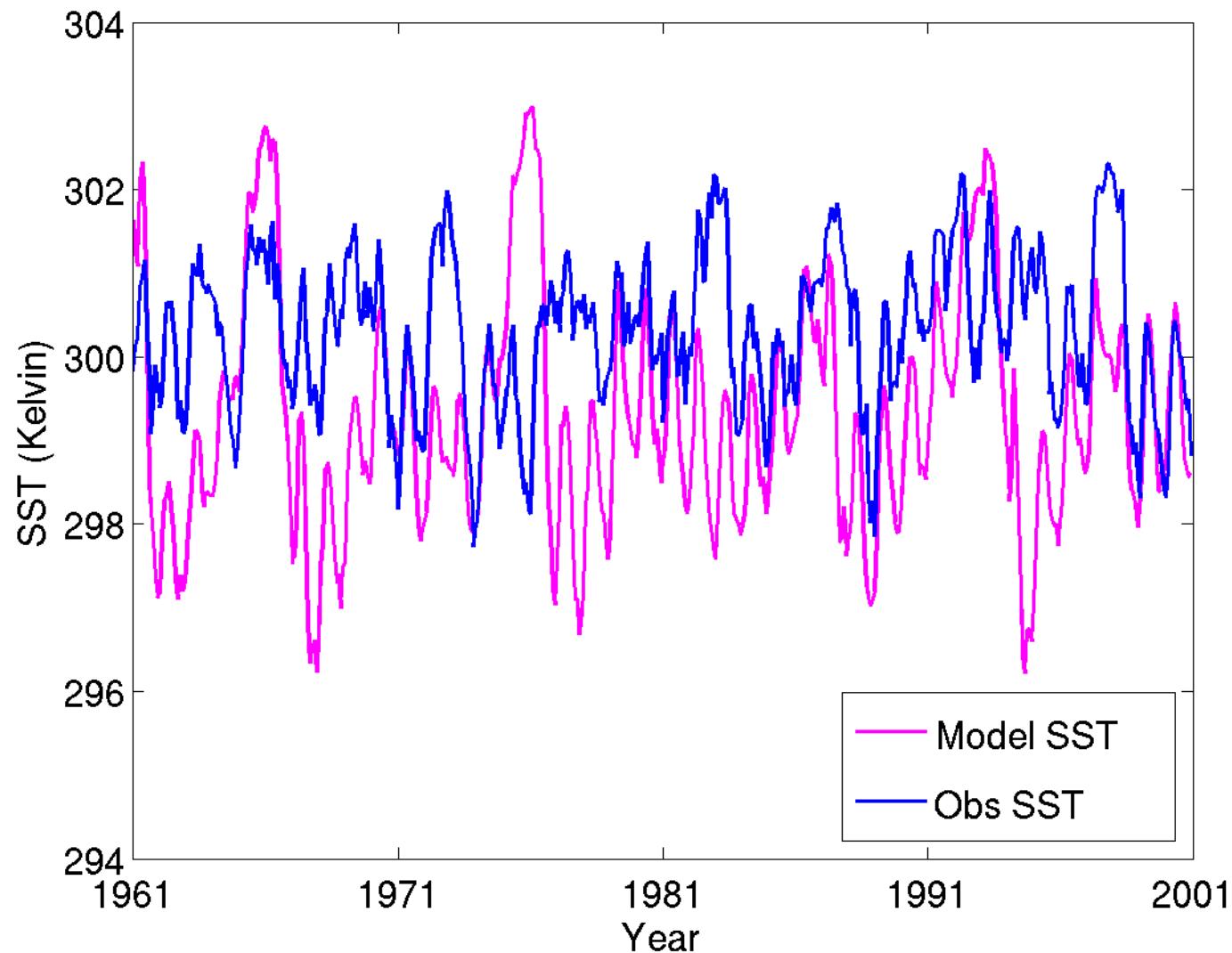
1961 2000 HADGEM2CC SST monthly



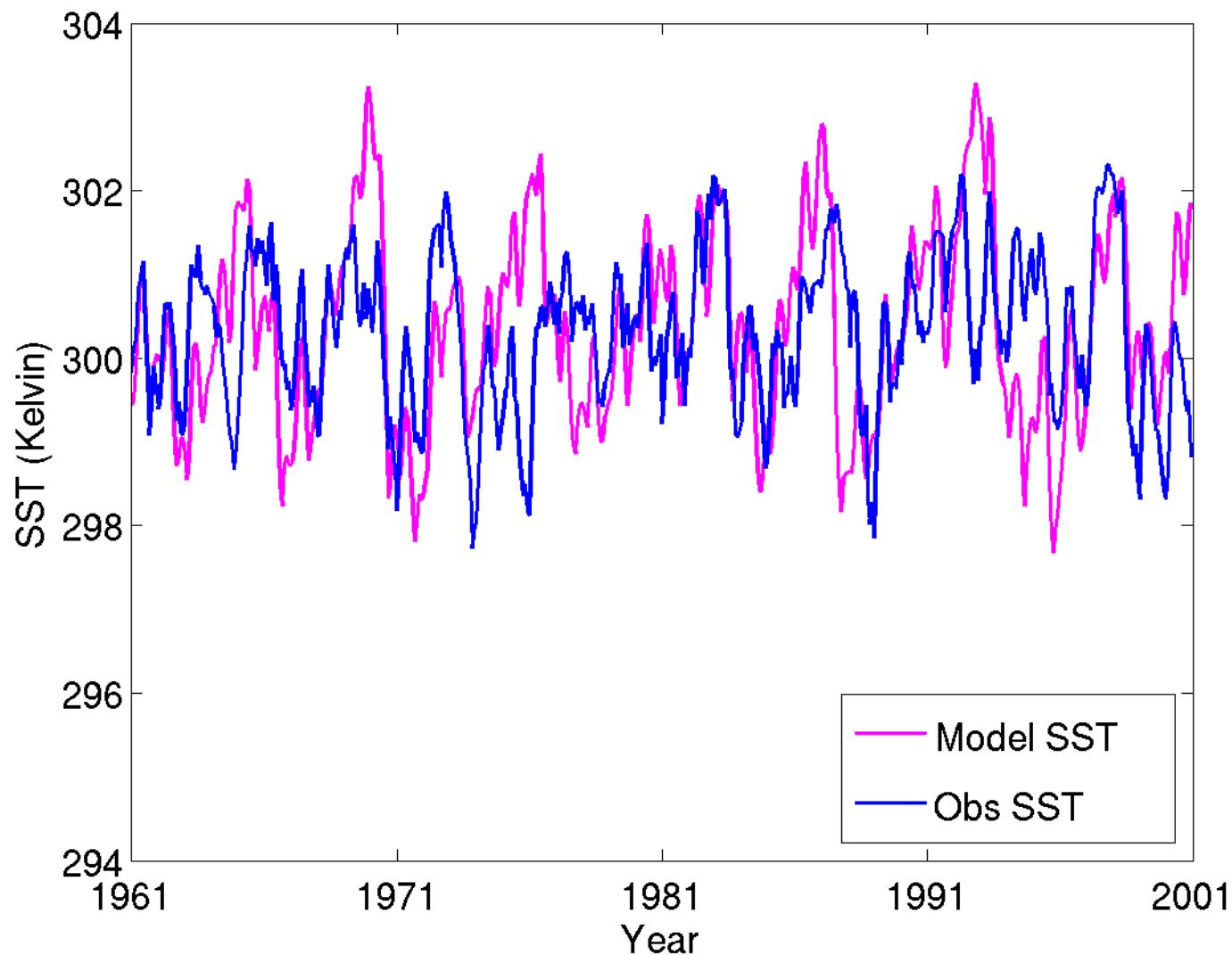
1961 2000 HADGEM2ES SST monthly



1961 2000 MIROC5 SST monthly



1961 2000 NCARCCSM4 SST monthly



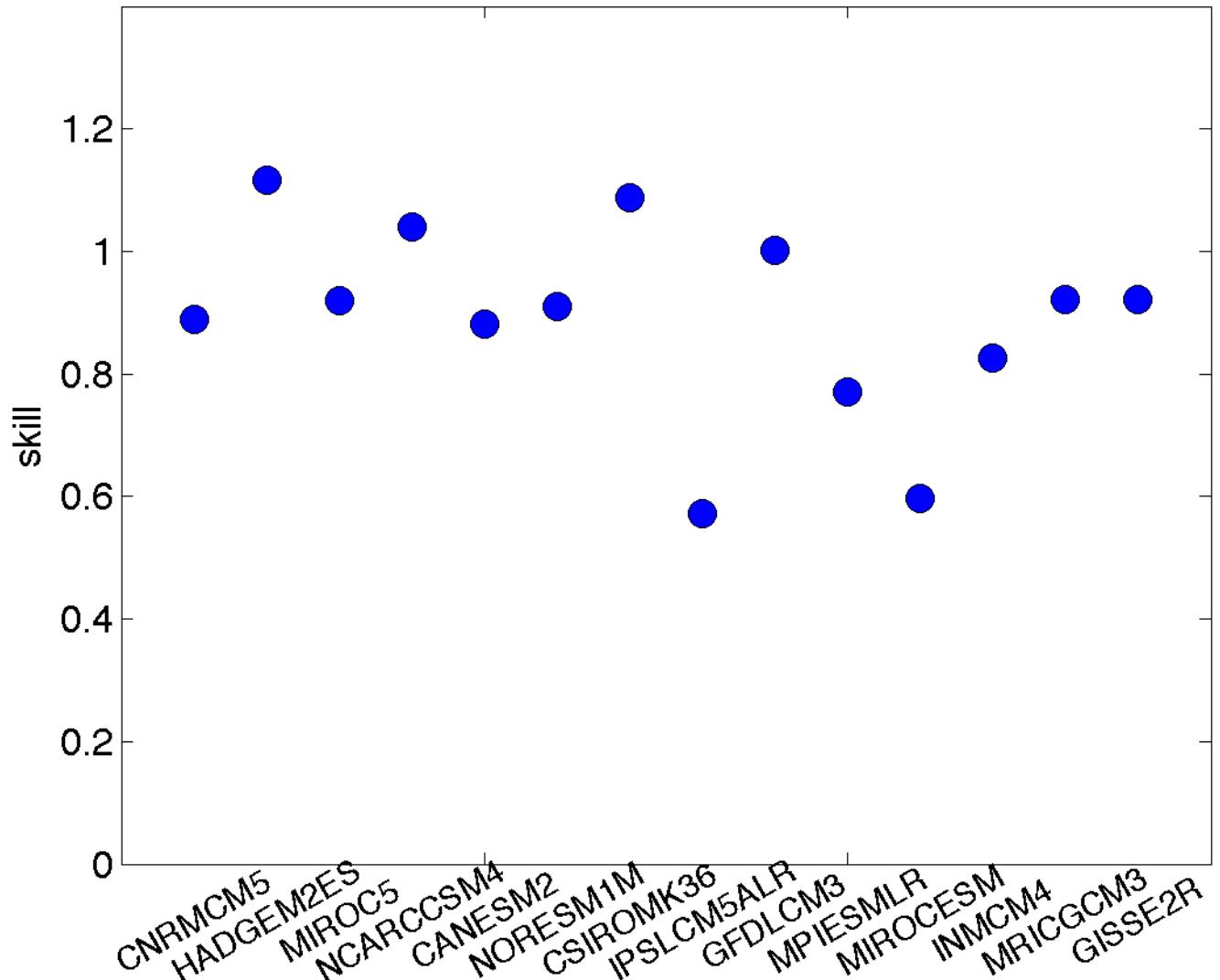


Figure 1. The teleconnection skill of CMIP5 models. The best model has a skill of 1.4.

To compare with GCM ranking from Rupp and Mote, I inverted the skill matrix with 0 skill value for perfect model.

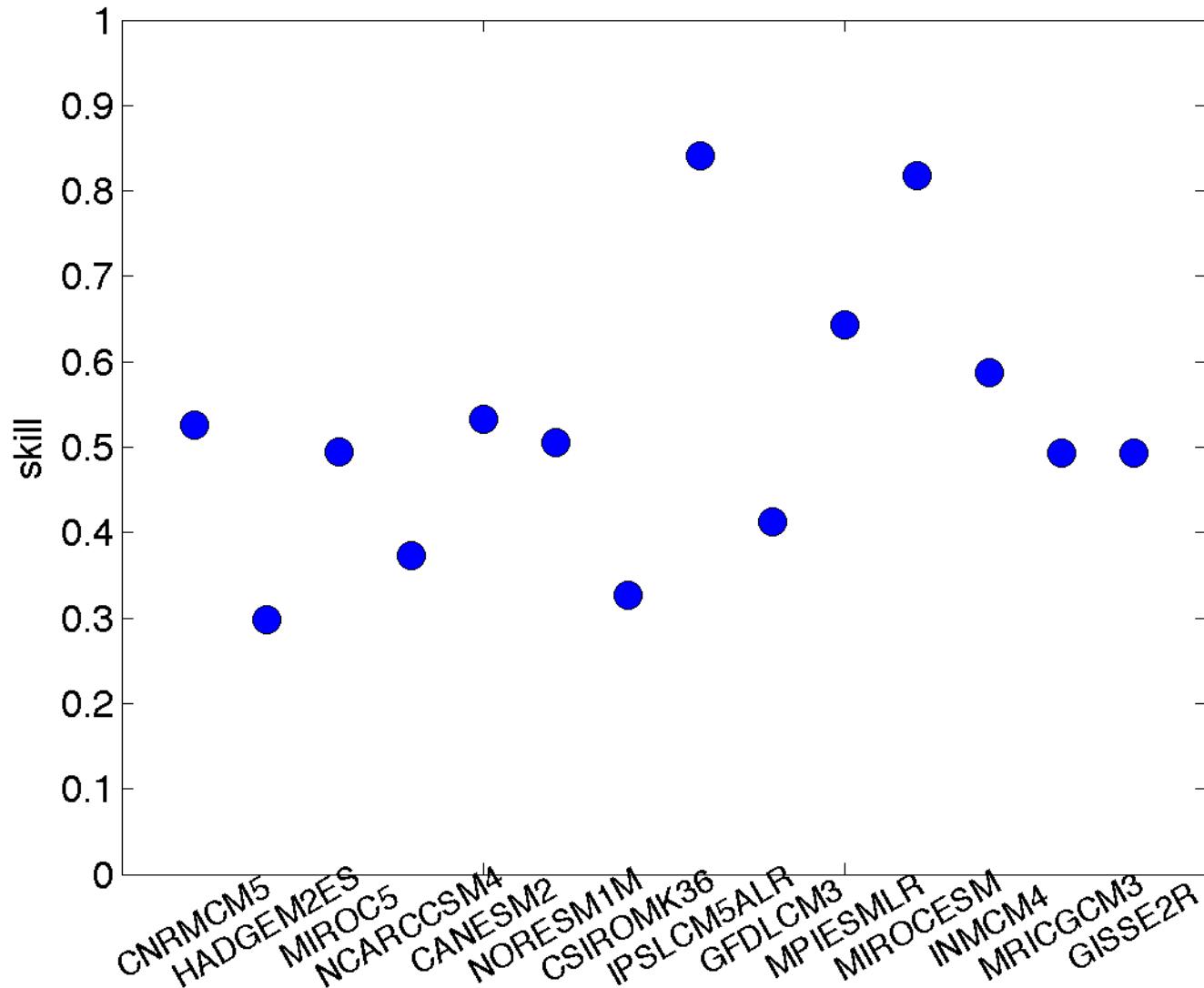


Figure 1. The teleconnection skill of CMIP5 models. The best model has a skill of 0.

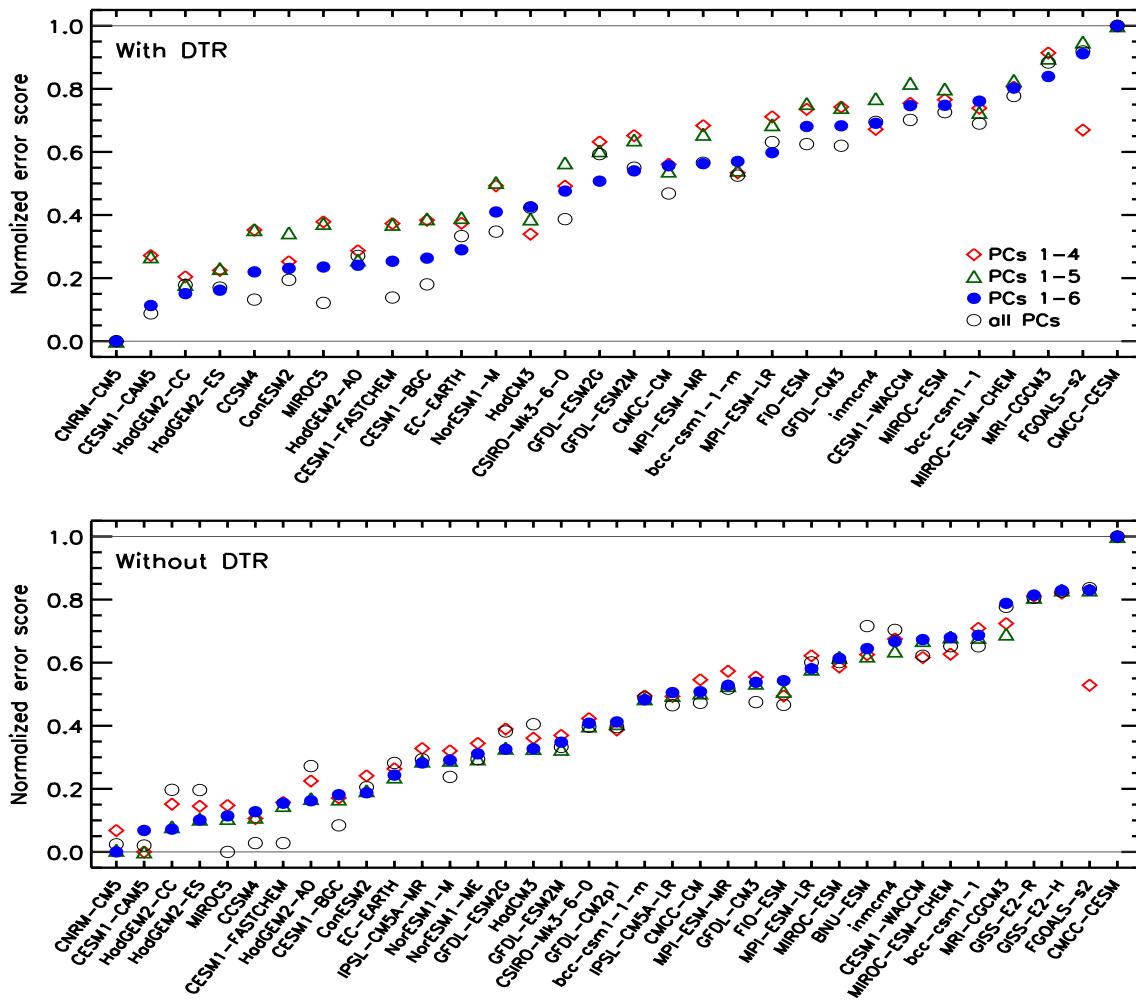
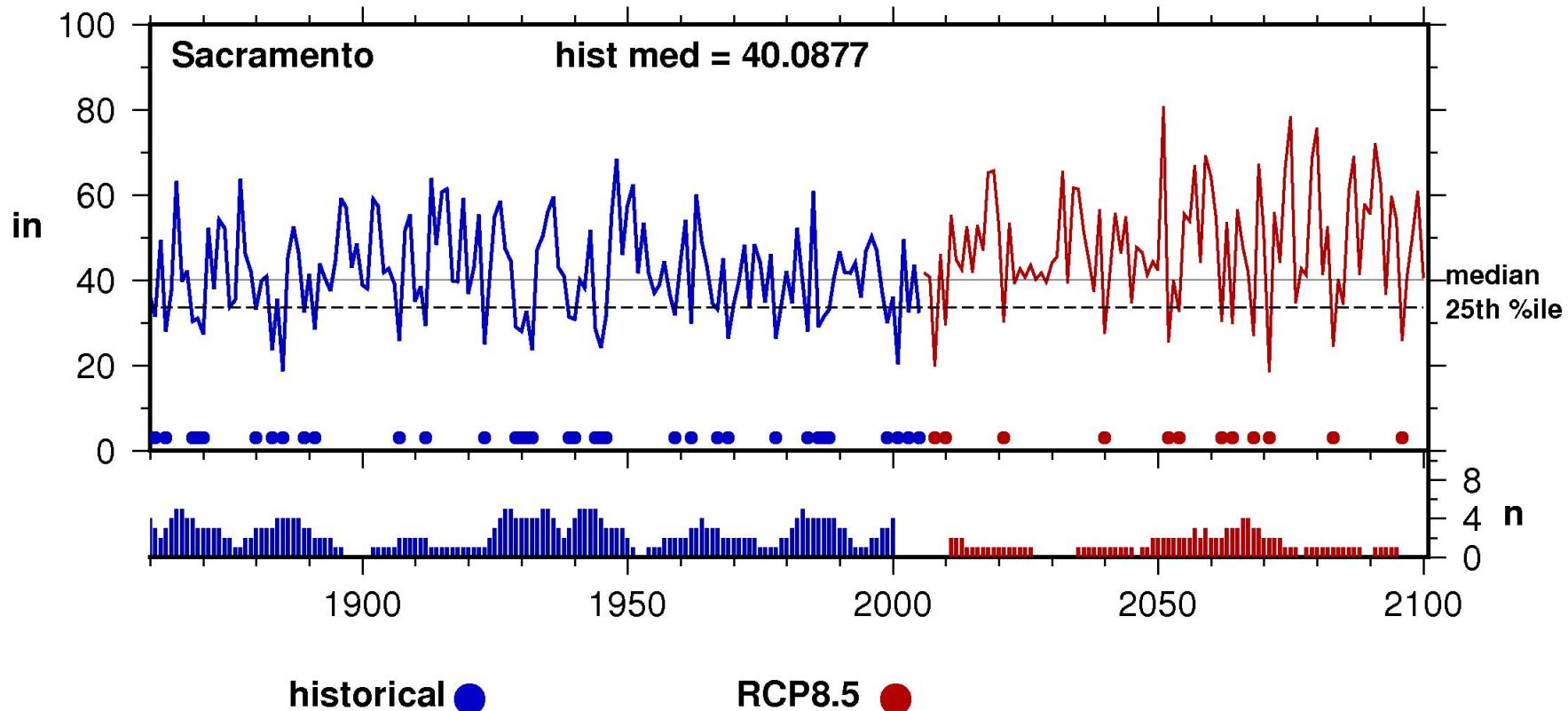


Figure 21. Models ranked according to normalized error score from EOF analysis of 18 (upper panel) and 16 (lower panel) performance metrics. The upper panel includes winter and summer mean diurnal temperature range (DTR), but 7 fewer GCMs. Ranking is based on the first 6 principle components (filled blue circles). The open symbols show the models' error scores using the first 4, 5, and all principle components (PCs). The best scoring model has a normalized error score of 0.

CNRM–CM5 annual (water year) precip

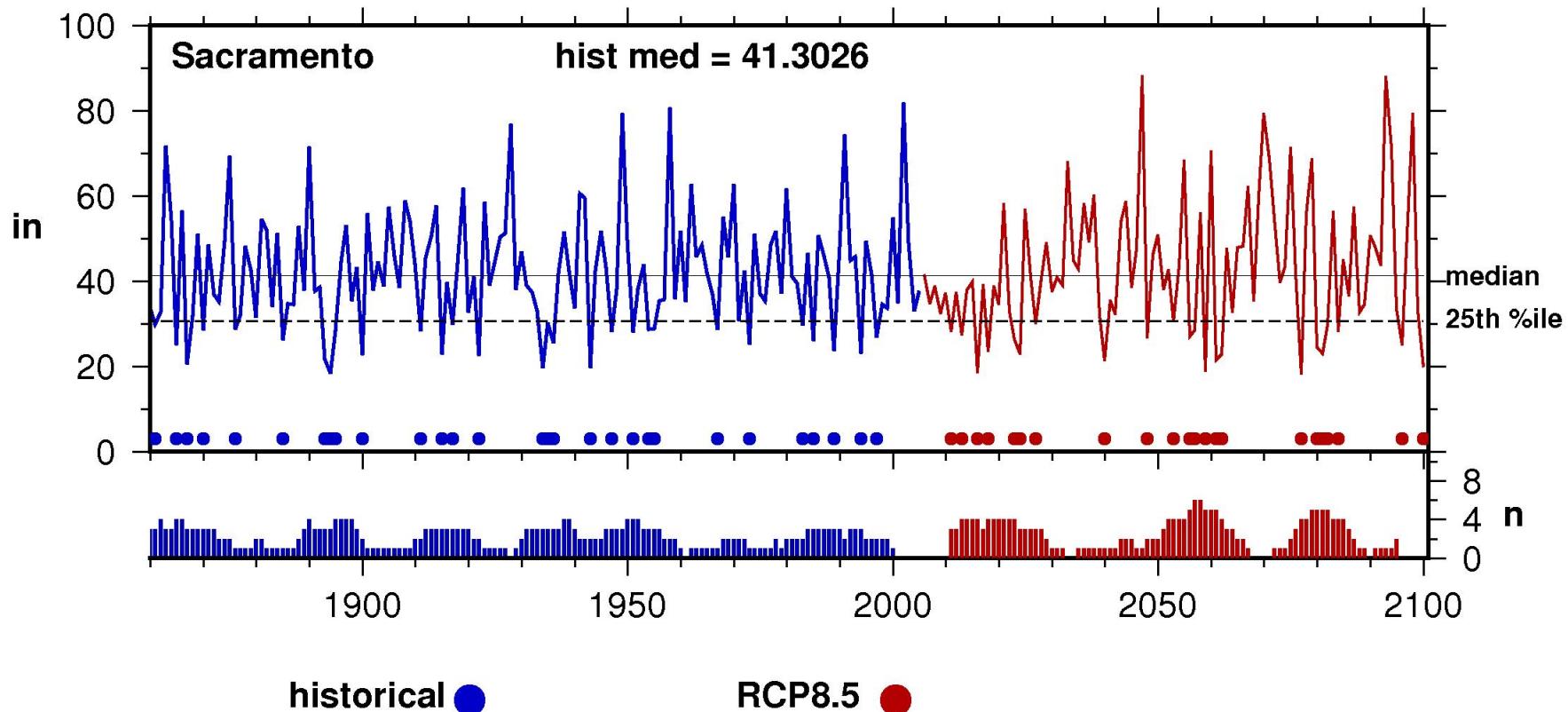
bars show running sum of 11yr centered 25th %ile cases



dots indicate years when precip is less than
the 25th historical (1970–1999) percentile

CESM1–CAM5 annual (water year) precip

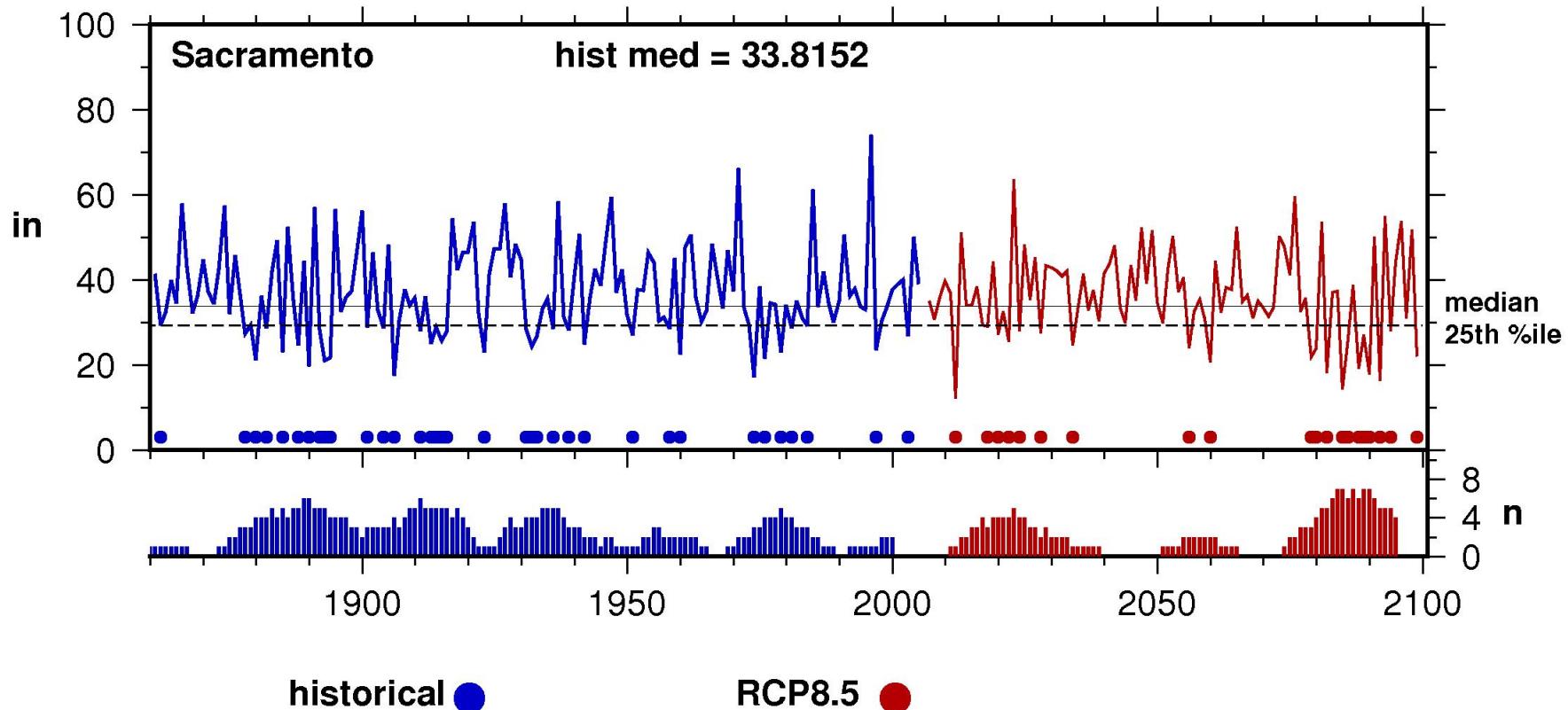
bars show running sum of 11yr centered 25th %ile cases



dots indicate years when precip is less than
the 25th historical (1970–1999) percentile

HadGEM2–CC annual (water year) precip

bars show running sum of 11yr centered 25th %ile cases



dots indicate years when precip is less than
the 25th historical (1970–1999) percentile